

Experience Profile Code Numbers (for use with questions 9 and 10)

001	Acoustics, Noise Abatement	045	High-rise; Air-Rights-Type Buildings	089	Rehabilitation (<i>Buildings; Structures; Facilities</i>)
002	Aerial Photogrammetry	046	Highways; Streets; Airfield Paving; Parking Lots	090	Resource Recovery; Recycling
003	Agricultural Development; Grain Storage; Farm Mechanization	047	Historical Preservation	091	Radio Frequency Systems and Shieldings
004	Air Pollution Control	048	Hospital and Medical Facilities	092	Rivers; Canals; Waterways; Flood Control
005	Airports; Navais; Airport Lighting; Aircraft Fueling	049	Hotels; Models	093	Safety Engineering; Accident Studies; OSHA Studies
006	Airports; Terminals and Hangers; Freight Handling	050	Housing (<i>Residential; Multi-Family; Apartments; Condominiums</i>)	094	Security Systems; Intruder and Smoke Detection
007	Arctic Facilities	051	Hydraulics and Pneumatics	095	Seismic Designs and Studies
008	Auditoriums and Theaters	052	Industrial Buildings; Manufacturing Plants	096	Sewage Collection; Treatment; Disposal
009	Automation; Controls; Instrumentation	053	Industrial Processes; Quality Control	097	Soils and Geologic Studies; Foundations
010	Barracks; Dormitories	054	Industrial Waste Treatment	098	Solar Energy Utilization
011	Bridges	055	Interior Design; Space Planning	099	Solid Wastes; Incineration; Landfill
012	Cemeteries (<i>Planning and Relocation</i>)	056	Irrigation; Drainage	100	Special Environments; Clean Rooms, etc.
013	Chemical Processing and Storage	057	Judicial and Courtroom Facilities	101	Structural Design; Special Structures
014	Churches; Chapels	058	Laboratories; Medical Research Facilities	102	Surveying; Platting; Mapping; Flood Plain Studies
015	Codes; Standards; Ordinances	059	Landscape Architecture	103	Swimming Pools
016	Cold Storage; Refrigeration; Fast Freeze	060	Libraries; Museums; Galleries	104	Storm Water Handling and Facilities
017	Commercial Building (<i>low rise</i>); Shopping Centers	061	Lighting (<i>Interiors; Display; Theatre, etc.</i>)	105	Telephone Systems (<i>Rural; Mobile; Intercom, etc.</i>)
018	Communications Systems; TV; Microwave	062	Lighting (<i>Exteriors; Streets; Memorials; Athletic Fields, etc.</i>)	106	Testing and Inspection Services
019	Computer Facilities; Computer Service	063	Materials Handling Systems; Conveyors; Sorters	107	Traffic and Transportation Engineering
020	Conservation and Resource Management	064	Metallurgy	108	Towers (<i>Self-Supporting and Guyed Systems</i>)
021	Construction Management	065	Microclimatology; Tropical Engineering	109	Tunnels and Subways
022	Corrosion Control; Cathodic Protection; Electrolysis	066	Military Design Standards	110	Urban Renewals; Community Development
023	Cost Estimating	067	Mining and Mineralogy	111	Utilities (<i>Gas and Steam</i>)
024	Dams (<i>Concrete; Arch</i>)	068	Missile Facilities (<i>Silos; Fuels; Transport</i>)	112	Value Analysis; Life-Cycle Costing
025	Dams (<i>Earth; Rock</i>); Dikes; Levees	069	Modular Systems Design; Pre-Fabricated Structures or Components	113	Warehouses and Depots
026	Desalination (<i>Process and Facilities</i>)	070	Naval Architecture; Off-Shore Platforms	114	Water Resources; Hydrology; Groundwater
027	Dining Halls; Clubs; Restaurants	071	Nuclear Facilities; Nuclear Shielding	115	Water Supply; Treatment and Distribution
028	Ecological and Archeological Investigations	072	Office Buildings; Industrial Parks	116	Wind Tunnels; Research/Testing Facilities Design
029	Educational Facilities; Classrooms	073	Oceanographic Engineering	117	Zoning; Land Use Studies
030	Electronics	074	Ordnance; Munitions; Special Weapons		
031	Elevators; Escalators; People-Movers	075	Petroleum Exploration	200	<u>Environmental Assessments</u>
032	Energy Conservation; New Energy Sources	076	Petroleum and Fuel (<i>Storage and Distribution</i>)	201	<u>Investigations/Studies</u>
033	Environmental Impact Studies, Assessments, or Statements	077	Pipelines (<i>Cross-Country – Liquid and Gas</i>)	202	
034	Fallout Shelters; Blast-Resistant Design	078	Planning (<i>Community, Regional, Areawide and State</i>)	203	<u>Remedial Design</u>
035	Field Houses; Gyms; Stadiums	079	Planning (<i>Site, Installation, and Project</i>)	204	<u>Remedial Actions</u>
036	Fire Protection	080	Plumbing and Piping Design	205	<u>Contractor Oversight</u>
037	Fisheries; Fish Ladders	081	Pneumatic Structures; Air-Support Buildings	206	<u>Technical Assistance</u>
038	Forestry and Forest Products	082	Postal Facilities	207	
039	Garages; Vehicle Maintenance Facilities; Parking Decks	083	Power Generation; Transmission; Distribution	208	
040	Gas Systems (Propane; Natural, etc.)	084	Prison and Correctional Facilities	209	
041	Graphic Design	085	Product; Machine and Equipment Design	210	
042	Harbors; Jetties; Piers; Ship Terminal Facilities	086	Radar; Sonar; Radio and Radar Telescope	211	
043	Heating; Ventilating; Air Conditioning	087	Railroad; Rapid Transit	212	
044	Health Systems Planning	088	Recreation Facilities (<i>Parks; Marinas, etc.</i>)	213	

1. Date Prepared: August 31, 2005							
2. Firm Name BEM Systems, Inc.		Business Address and Primary Phone Number 7500 North Dreamy Draw Drive, Suite 232 Phoenix, AZ 85020 (602) 266-2011					
2.1 Submittal is for <input type="checkbox"/> Parent Company <input checked="" type="checkbox"/> Branch or Subsidiary Office							
3. Year Present Firm was Established 1990	4. Specify type of ownership and check below, if applicable. a. Small Business <input type="checkbox"/> b. Small Disadvantaged Business <input type="checkbox"/> c. Women – Owned Business <input type="checkbox"/>						
5. Name of Parent Company, if any:	5.1 Former Parent Company Name(s), if any:		5.2 Year Parent Company was Established:				
6. Names of not more than two Principals to contact:							
1.	Name Richard J. Newill	Title Director Southwest Region	Telephone Number (602) 266-2011				
	Fax Number (602) 274-3474						
	E-Mail Address: RNewill@bemsys.com						
2.	John Mieher	Director of Federal Services	(602) 266-2011				
	(602) 274-3474						
	E-Mail Address: JMieher@bemsys.com						
7. Total Personnel by Discipline: (List each person only once, by primary function)							
10	Administrative	0	Electrical Engineers	0	Oceanographers	1	Industrial Hygienists
1	Architects	2	Estimators	1	Planners: Urban/Regional	2	CAD/CADD Operators
4	Chemical Engineers	10	Geologists	1	Sanitary Engineers	3	Data Validators
10	Civil Engineers	3	Hydrologists	2	Soils Engineers	11	Environmental Engineers
3	Construction Inspectors	0	Interior Designers	1	Specifications Writers	15	Environmental Scientists
2	Draftsmen	0	Landscape Architects	1	Structural Engineers	3	GIS/MIS/GPS Specialists
2	Ecologists	2	Mechanical Engineers	1	Surveyors	1	Toxicologists/Risk Assessors
0	Economists	0	Mining Engineers	1	Transportation Engineers	93	Total Personnel
8. Summary of Professional Services Fees Received: (Insert Index Number)						Ranges of Professional Services Fees "Index"	
Last five years (most recent year first)						1. Less than \$100,000	
						2. \$100,000 to \$250,000	
						3. \$250,000 to \$500,000	
						4. \$500,000 to \$1 Million	
						5. \$1 Million to \$2 Million	
						6. \$2 Million to \$5 Million	
						7. \$5 Million to \$10 Million	
						8. \$10 Million or greater	
9. Profile of Firm's Relevant Project Experience							
	Profile Code	Number of Projects	Total Gross Fees		Profile Code	Number of Projects	Total Gross Fees
1.	200	375	\$1,500,000	4.	203	51	\$17,211,394
2.	201	32	\$5,280,580	5.	204	51	\$17,211,394
3.	202	51	\$17,211,394	6.	205	32	\$5,280,580

10. Project Examples, Last Five Years											
	Profile Code	"P," "C," "SC," or "IE"	Project Name and Location		Owner Name		Owner Phone Number	Cost of Work	Completion Date (Actual or Estimated)		
1.	201/202	P	Remedial Action Contracts, Williams AFB, Mesa, AZ		AFCEE Contact: Bill Lopp		(210) 536-4170	\$6,450,000	March 2006		
2.	205	P	Phoenix-Goodyear Airport Phoenix, AZ		City of Phoenix Aviation Contact: Cynthia Parker		(602) 273-2730	\$300,000	March 2006		
3.	200	P	Small Arms Firing Range MCAS Yuma, AZ		AFCEE/ERS Contact: Robyn Vida		(928) 269-5331	\$1,090,000	August 2005		
4.	203	P	Elmendorf AFB Valve Pit 11 RA, Anchorage, AK		AFCEE/PKVV-AK Contract: Linda Fellows		(907) 552-9762	\$250,000	May 2006		
5.	204	P	Building 303 Investigation MCAS Yuma, AZ		AFCEE/ERS Contact: Robyn Vida		(928) 269-5331	\$71,000	June 2005		

11. Personnel by discipline: (List each person only once, by primary function.) Enter proposed personnel at the Task Assignment Level on line "A".											
A		A		A		A		A		A	
1	10	Administrative	9	0	Electrical Engineers	17	0	Oceanographers Planners: Urban/Regional	25	1	Industrial Hygienists
2	1		Architects Chemical Engineers	10	2	Estimators	18		1	26	2
3	4	Civil Engineers Construction Inspectors		11	10	Geologists	19	1	Sanitary Engineers	27	3
4	10		Draftsmen	12	3	Hydrologists	20	2	Soils Engineers Specifications Writers	28	11
5	3	Ecologists		13	0	Interior Designers Landscape Architects	21	1	Structural Engineers	29	15
6	2		Economists	14	0	Mechanical Engineers	22	1	Surveyors	30	3
7	2	Mining Engineers		15	2		23	1	Transportation Engineers	31	1
8	0			16	0		24	1		32	93

12. All work by firm currently being performed directly for State Agencies. (list not more than 5 projects)						
	a. Project Name and Location	b. Nature of Firm's Responsibility	c. Agency (Responsible Office) Project Managers Name & Phone Number	d. Completion Date (Actual or Estimated)	e. Estimated Cost (In Thousands)	
					Entire Project	Work for Which Firm was/is Responsible
1.						
2.						
3.						
4.						
5.						

13. Work by firm, which best illustrates current qualifications relevant to this contract. (list not more than 5 projects)

	a. Project Name and Location	b. Nature of Firm's Responsibility	c. Project Owner's Name and Project Managers Name & Phone Number	d. Percent Complete	e. Estimated Cost (In Thousands)	
					Entire Project	Work for Which Firm was/is Responsible
1.	Full Service Remedial Action Contracts at Williams Air Force Base (AFB), Mesa, Arizona	Work plans, IDW mgt., data mgt., investigation, sampling, well installation, remedy selection, design and construction, O&M, LTM, and Site closure	AFCEE 3300 Sidney Brooks Brooks City-Base, TX 78235-5112 Contact: Bill Lopp (210) 536-4170	95%	\$6,450,000	\$6,450,000
2.	City of Phoenix Aviation Phoenix, AZ	Work plans, IDW mgt., contractor oversight, technical assistance, remedial construction	City of Phoenix Aviation 3400 Sky Harbor Blvd. Phoenix, AZ 85034 Contact: Cynthia Parker (602) 273-2730	50%	\$300,000	\$300,000
3.	Small Arms Firing Range Closure Marine Corps Air Station (MCAS) Yuma, AZ	Environmental assessments, sampling, remediation, site included in ADEQ Voluntary Remediation Program with No Further Action letter expected in Aug 05.	AFCEE/ERS Yuma, AZ Contact: Robyn Vida (928) 269-5331	99%	\$1,090,000	\$1,090,000
4.	Elmendorf Valve Pit 11 Performance Based Contract Remedial Action	Work plans, remedial design, field screening, soil sampling, remedial action, soil removal	AFCEE/PKVV-AK Elmendorf AFB, AK Contract: Linda Fellows (907) 552-9762	90%	\$250,000	\$250,000
5.	Building 303 Site Investigation Marine Corps Air Station (MCAS) Yuma, AZ	Work plans, IDW mgt., contractor oversight, investigation, technical assistance, remedial construction	AFCEE/ERS Yuma, AZ Contact: Robyn Vida (928) 269-5331	100%	\$71,000	\$71,000

14. Brief resume of key persons, specialists and individual consultants/associates anticipated for this contract:			
Name of Individual		Title	
Richard J. Newill, RPG		Director Southwest Region	
Personnel Classification/Level <i>(Reference ASRAC Statement of Work Table 1)</i>		Area of Expertise	
Professional Level VI		Program Manager and Hydrogeologist	
Proposed Project Role <i>(e.g. Project Manager, Project Engineer, Project Hydrologist, ect.)</i>		Education	
Program Manager		MS, Geology (Hydrogeology), University of Kansas, 1989 BS, Geological Engineering, Colorado School of Mines, 1983	
Years of Experience	Years of Related Experience	Registrations and Certifications Held and Year Received	
23	23	Registered Professional Geologist: Arizona, 2004; California, 1991; Wyoming, 1992; Idaho, 1995	
Employment History			
	Firms Name	Start Date	End Date
1.	BEM Systems, Inc., Director Southwest Region, Williams AFB Program Mgr.	June 2003	Present
2.	Foothill Engineering Company, Senior Managing Principal, Program Mgr	December 2000	January 2003
3.	URS Corporation, Hydrogeology Group Manager	June 1997	December 2000
4.	Woodward-Clyde, Waste Management Division Manager, Sr. Hydrogeologist	August 1987	June 1997
5.	University of Kansas Center for Research, Laboratory Manager	June 1984	August 1987
6.	U.S. Geological Survey, Hydrologic Technician	1982	1984
7.			
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9.			
10.			
<p>Executive Summary of Career Highlights</p> <p>Mr. Newill is a senior hydrogeologist and Registered Professional Geologist in Arizona with 23 years of professional experience in directing and performing environmental remediation projects for government, public agency, and private-sector clients. He has served as Program and Project Manager and/or Senior Technical Manager for major projects for the Air Force Center for Environmental Excellence (AFCEE), Environmental Protection Agency (EPA), General Services Administration (GSA), U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, U.S. Department of Energy, and major industrial and mining corporations. In recent years, Mr. Newill has directed a wide variety of large-scale investigation, remediation, hydrogeology and modeling projects involving complex groundwater, surface water, and contamination conditions.</p> <p>Mr. Newill currently serves as the Director of the Southwest Region for BEM Systems, Inc. In this role, Mr. Newill is responsible for operations, project implementation, and client service for all states from the Rocky Mountains west.</p> <p>Prior to joining BEM Systems, Inc., Mr. Newill was a Senior Managing Principal for a 30-person environmental engineering firm in Colorado, and served in California, Colorado, and Kansas as a Group Leader and Division Manager for a major international environmental engineering firm.</p> <p>Program Manager for multiple remediation and long-term monitoring projects at the Former Williams Air Force Base near Phoenix, Arizona, including a CERCLA remediation of the former aircraft liquid fuel storage area. The selected remedy for groundwater involves the use of innovative thermal enhanced extraction and soil vapor extraction technologies to recover contaminated groundwater, non-aqueous phase liquid, and fuel residue from the vadose zone and saturated subsurface to depths of 250 feet. This multimillion-dollar project is being performed to support high-profile base closure and property transfer activities at the facility. Major components of the project include remedy selection, detailed engineering design, construction, operation and maintenance, and comprehensive performance evaluation of complex extraction and treatment systems. Mr. Newill has played the lead role in facilitating BRAC Cleanup Team and Restoration Advisory Board meetings involving the Air Force, regulators, property reuse stakeholders, and the public. This project also involved detailed work plan development, and development of a Williams AFB GIS-enabled data management system for a wide variety of complex site data.</p>			

Brief Resume Continued

Project Manager for performance based contract (PBC) for soil removal action at Elmendorf Air Force Base, Alaska. This project was the first PBC executed in this AF division. The project, which involved critical excavation work around operational fuel pipelines, was completed successfully with site closure and received client commendations from both AFCEE and Base personnel.

Program Manager for a site-wide RCRA Facility Investigation (RFI) of the Denver Federal Center (DFC) for the General Services Administration. This project included groundwater, surface water, and contaminant characterization of multiple investigations and contamination sites involving a wide range of contaminant types, including explosives compounds, petroleum compounds, solvents, biological agents, pesticides/herbicides, and radionuclides. This project, which included characterization of impacts to water quality in a 4-acre reservoir and in streams, involved intensive technical negotiations with the Colorado Department of Public Health and Environment. Multiple fast-track projects were completed to support transfer of property for local reuse as a light-rail facility. This project also included multiple environmental site assessments conducted at the sister installation in Utah.

Hydrogeology Program Manager for major RFI/RI Investigations and CMS/FS studies of Operable Units Two (OU2) and Six (OU6), Rocky Flats Environmental Technology Site, Golden, Colorado. Responsible for hydrogeologic and contaminant characterization of complex groundwater and surface water flow systems with multiple contaminant sources involving solvents, metals, and radionuclides. Managed development and application of complex numerical groundwater flow and groundwater and surface water fate and transport models in support of human health risk assessment and feasibility studies. Provided hydrogeologic support for an EECA to expedite remediation of waste disposal trenches.

Hydrogeology and Hydrology Program Manager for a CERCLA remedial investigation/feasibility study for the Midnite Uranium Mine located on the Spokane Indian Reservation in eastern Washington State. This work conducted for EPA Region X involved a comprehensive review of existing environmental and hydrogeologic data, a thorough data gap analysis through rigorous application of EPA's Data Quality Objectives process to address risk assessment objectives, and implementation of several large-scale field investigations involving multiple drilling and sampling crews. Chemicals of concern included metals, radionuclides, and petroleum compounds. Key issues revolved around risks of discharge of contaminants from the mine to down stream creeks used by the Spokane Tribe for cultural purposes. Mr. Newill was instrumental in establishing technical credibility with a diverse and challenging group of stakeholders, including tribal representatives.

Field Program Manager for Base Realignment and Closure (BRAC) program under contract with the U.S. Army Corps of Engineers, Seattle District. This \$6 million, fast-track, high visibility project involved conducting field Environmental Baseline Surveys (EBS), and preparation of EBS and CERFA Reports, Sampling and Analysis Recommendations (SARs), and BRAC Cleanup Plans (BCPs) for 23 Army bases throughout the U.S. and Puerto Rico. Responsible for management and technical direction of over 35 technical and support personnel. Directed preparation of BRAC Cleanup Plans and facilitated meetings of BRAC Cleanup Teams (BCTs) involving installation personnel, EPA, and state regulators.

Project Manager and Lead Hydrogeologist for a Comprehensive Groundwater Characterization Study, including groundwater flow and pit lake quality modeling, for the Chino Mine in New Mexico. This work was conducted in support of mine expansion engineering design and permitting activities, and to support development of mine closure plans regarding land and water use. Project technical complexities included characterization and detailed numerical groundwater flow modeling of a hydrogeologically complex fractured-bedrock flow system involving a 1.5-mile-wide, 2,000-foot-deep open pit, numerous large-scale leach stockpiles, and extensive underground mine workings; and predictive geochemical modeling of open pit lake water quality following mine closure. This project was awarded a National Technical Excellence Award for Water Resources/Mining.

Program Manager for RCRA Facility Investigations and long-term monitoring (LTM) at IRP sites at England AFB in Louisiana. This \$4 million project involved characterization and long-term monitoring of multiple fuel and hazardous waste management sites, including landfills, the POL Yard, fire training areas, and buried fuel and sewer pipelines. Directed fate and transport and biodegradation modeling to assess the long-term monitoring needs associated with a persistent benzene plume in groundwater.

Lead Hydrogeologist and Modeling Task Manager for a focused feasibility study of alternatives for remediation of contaminated groundwater associated with the Bingham Copper Mine in Utah. The MODFLOW, MINTEQ, and SOLUTE modeling codes were used to simulate groundwater flow and contaminant transport within a 30 square mile sulfate plume, including an area of oversaturated groundwater where solid phase sulfate is present. This project involved substantial technical complexities requiring innovative approaches to fate and transport simulation. The results of this work were used to effectively demonstrate that pump and treat alternatives, previously favored by the EPA, were economically infeasible.

14. Brief resume of key persons, specialists and individual consultants/associates anticipated for this contract:			
Name of Individual		Title	
Donald W. Richardson, CPG		Director of Remediation Services	
Personnel Classification/Level <i>(Reference ASRAC Statement of Work Table 1)</i>		Area of Expertise	
Professional Level VI		Remedial investigation, design and operation	
Proposed Project Role <i>(e.g. Project Manager, Project Engineer, Project Hydrologist, ect.)</i>		Education	
Task Order Technical Support		MS, Hydrology, University of New Hampshire, 1995 BS, Geology, Washington and Lee University, 1984	
Years of Experience	Years of Related Experience	Registrations and Certifications Held and Year Received	
21	21	Certified Professional Geologist, NJ, 2002 Subsurface Evaluator, Professional Registration, NJDEP	
Employment History			
	Firms Name	Start Date	End Date
1.	BEM Systems, Inc.	October 2002	Present
2.	Haley & Aldrich	October 1997	October 2002
3.	GEO Engineering, Inc.	March 1987	September 1997
4.	Moretrench American Corporation	October 1984	February 1987
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<p>Executive Summary of Career Highlights</p> <p>Mr. Richardson has experience in both environmental remediation contracting and consulting services. He couples his academic training in hydrology and hydrogeology with his practical experience in environmental engineering to develop technical solutions to problems posed by the environmentally regulated community. He has provided expert support services in the areas of contaminate fate and transport, groundwater remediation, surface water hydrology, and construction dewatering.</p> <p>Mr. Richardson has extensive experience in conducting hydrogeologic assessments to facilitate the design of hydraulic control systems for both construction dewatering and groundwater remediation. He began his career working for Moretrench American Corporation, a national construction-dewatering firm. There he gained experience in the design and implementation of a variety of groundwater control strategies, including wellpoints, deep wells, ejector wells, slurry walls and freeze walls.</p> <p>His consulting experience drew from his practical implementation of these control strategies to assist in the design of groundwater contamination abatement systems. He specializes in the design of aquifer testing field protocol, data analysis and computer modeling to evaluate pertinent formation of hydraulic parameters affecting design of a control measure. Mr. Richardson is a creative thinker and a hydrogeologist with strength in coordinating technical teams of engineers and scientists, directing strategic planning and business growth, as well as, a proven senior manager who develops initiatives and solutions for implementation.</p> <p>Dukes Parkway Landfill, Somerset County, NJ: Supervised a preliminary assessment, site investigation and developed a remedial action workplan for the Park Commission on this 200 acre former municipal solid waste and industrial waste landfill. Oversaw a review of pertinent geologic studies and publications to understand the regional fracture pattern of the bedrock shale unit beneath this site. Coordinated the placement of shallow borings and the construction of a supplemental monitoring well to evaluate soil and groundwater conditions. Negotiated and prepared a workplan for NJDEP review that includes supplemental closure requirements to facilitate unrestricted property use for passive recreation.</p>			

Brief Resume Continued

Barton Landfill, Edwardsville, IL: Managed the remedial investigation and oversaw the groundwater remediation construction of a slurry wall around this 300-acre landfill. Researched published geologic information and compared published information to on-site geology. Responsible for the field inspection and logging of over 50 boreholes completed by two drill rigs running simultaneously. The boreholes were primarily completed in unconsolidated glacial deposits resting on bedrock. Implementing continuous sampling at each borehole to approximately 50 feet by utilizing a 5 ft by 3-inch diameter core barrel within hollow stem augers to collect representative samples of the discretely alternating clay, sand, silt and gravel layers. Constructed several geologic profiles based on the materials encountered and research of the depositional environment that was used to design a cutoff structure between this landfill and an adjacent stream. Performed field monitoring of the installation of a slurry wall containment structure around the landfill. Responsible for evaluating the most suitable geologic layer to key slurry wall containment structure. Interacted with the slurry wall contractor to ensure construction of the wall intersected the key layer.

Fulton v. Allstate Insurance Company, NJ: Provided expert services in support of the defendant, Allstate Insurance Company. The Fultons were third party claimants alleging damages to their property from the neighboring residence insured by Allstate. The claim was for payment of damages and pain and suffering because of alleged delays. Prepared an expert report and facilitated cleanup of this offsite property to facilitate a reasonable settlement for damages.

Micioni v. Barco Systems, Inc., NJ: Provided expert services in support of the insured's (insured by Allstate Insurance Company) claim against Barco Systems (cleanup contractor) for breach of contract. Barco was retained by the insured to design and implement a cleanup approach to address a fuel oil release. Reviewed several years of operation and maintenance records of a pump and treatment system for groundwater contamination; coordinated the design and implementation of an independent site investigation; prepared an expert report and provided expert testimony. The outcome was a favorable settlement for our client and their insurance carrier.

Confidential Insurance Defense Litigation Matter, Newark, NJ: Supervised technical services to support legal defense of a landfill owner. Oversaw the development of a forensic investigation approach to evaluate the nature and timing of contamination and fill placement. The approach hinged on use of both chemical testing data and the use of historic aerial photographs to recreate the timing of alleged contamination to soil and groundwater.

14. Brief resume of key persons, specialists and individual consultants/associates anticipated for this contract:			
Name of Individual		Title	
Douglas R. Beal, PG		Senior Project Manager/Hydrogeologist	
Personnel Classification/Level <i>(Reference ASRAC Statement of Work Table 1)</i>		Area of Expertise	
Professional Level V		Hydrogeology, Remedial Technologies, Modeling	
Proposed Project Role <i>(e.g. Project Manager, Project Engineer, Project Hydrologist, ect.)</i>		Education	
Task Assignment Project Manager		BA, Geology, BA Environmental Studies	
Years of Experience	Years of Related Experience	Registrations and Certifications Held and Year Received	
25	25	NJ Subsurface Evaluation, 1995; NJ Cleanup Star Cert., 2004; Professional Geologist PA, 1994; AK, 1989	
Employment History			
	Firms Name	Start Date	End Date
1.	BEM Systems, Inc.	July 1998	Present
2.	ABB Environmental Services, Inc.	1992	July 1998
3.	Metcalf & Eddy, Inc.	1989	1992
4.	The Earth Technology Corporation	1987	1989
5.	Pioneer Western Energy	1985	1987
6.	Enterprise Energy Corporation	1984	1985
7.	Atlas Energy Corporation	1981	1984
8.	Century Geophysical Corporation	1980	1981
9.			
10.			
<p>Executive Summary of Career Highlights</p> <p>Douglas Beal is a Senior Project Manager and hydrogeologist with 25-years of experience in conducting remedial investigations and implementing remedial actions at sites throughout the nation. Mr. Beal has particular expertise in the areas of hydrogeology, field procedures, environmental sampling and analysis, contaminant fate and transport, and the application of innovative remediation services.</p> <p>Williams Air Force Base, Mesa, Arizona: For the last several years, Mr. Beal has served as the Lead Hydrogeologist for this major CERCLA program involving closure of multiple environmental sites at the former Williams AFB. Mr. Beal was instrumental in development of the hydrogeologic conceptual site models (CSMs) for multiple sites, including LF004 (Landfill), ST012 (tank farm), SS017 (pesticides storage), and B760 (former service station). Mr. Beal has directed fate and transport and natural attenuation evaluations, designed monitoring and extraction wells, evaluated soil vapor sampling, and directed VOC source identification studies.</p> <p>S&G Site, Scottsdale, Arizona: Mr. Beal serves as the Lead Hydrogeologist for this petroleum release project involving SVE and air sparging. Mr. Beal has designed and directed environmental sampling activities, including soil, vapor, and groundwater sampling and analysis. Mr. developed a conceptual site model to support evaluation of monitored natural attenuation as an appropriate remedy for the site. He has directed and evaluated soil and groundwater sampling activities.</p>			

Brief Resume Continued

Metal Fastener Manufacturer (Cornell), NY: Represented this client through the entire regulatory process, from an initial Phase I assessment through remediation. Conducted DNAPL (TCE) site investigation, remedy selection, soil source removal, and installed groundwater extraction and treatment systems. Groundwater contamination has been reduced by 99%, from 25,000 ug/l in 1993 to 213 ug/l in 1999. Other project aspects included preparation of an expert report, deposition and participated in settlement negotiations as an expert witness that led to an out-of-court insurance settlement. Negotiated a Consent Order with the NYSDEC and obtained local POTW Industrial Discharge Permit for acceptance of TCE contaminated groundwater without pretreatment into the local sewer system.

Siemens Corporation: Mr. Beal is responsible for chemical oxidation remediation of residual kerosene contamination using potassium permanganate. The residual contamination is from an initial release over approximately 23,000 gallons that occurred in 1993. Bench-scale testing was completed evaluating Fenton's Reagent and potassium permanganate as possible remedial options. Both bench-scale tests were successful and BEM is currently completing the pilot and full scale-remediation. The project was successfully closed in 2003.

Paint and Dye Manufacturer (Confidential Client): Supported this New Jersey client with a remedial investigation and groundwater remediation resulting from a toluene, ethylbenzene, and xylene release from underground storage tanks and transfer pumps used in the manufacturing process. Evaluated and performed aquifer tests to improve the groundwater extraction system pumping efficiency and provide maximum capture of the plume. Improved the design of the groundwater barrier extraction system that is used to prevent groundwater plume from contaminating the town's supply wells, which are located downgradient of the site. The groundwater extraction system components include 10 groundwater extraction wells, iron-sequestering agent, 8,000-gallon bioreactor with blowers, iron filtration system, and infiltration galleries.

Former Coffee Processing Facility, Hoboken, NJ: Project Hydrogeologist for a \$300M Brownfield Redevelopment project. Prepared Remedial Investigation and Remedial Action work plan for the 24-acre site. Used passive soil gas sampling (Goresorber) to identify location of DNAPL (TCE) source area. The site is immediately adjacent to the Hudson River with complex subsurface fluvial deposits. Successfully used a fate and transport evaluation to determine the environmental impacts to the Hudson River and to allow the source area to remain using engineering control. Was able to demonstrate that the residual contaminant mass posed minimal risk to the Hudson River, and the natural attenuation remedial approach was approved by the NJDEP.

Major Gasoline Retailer: Coordinated all environmental aspects to support the rebuilding of 27 gasoline stations in New Jersey under a very aggressive and demanding project schedule. Scope of services included UST closure permits and site assessment plans as well as incorporating remedial system components within the subsurface during the rebuilding of the stations. Soil management and reuse plans were also developed as part of the project. Specific project tasks were unique to each location, but included product recovery systems and soil vapor extraction systems.

GATX Terminals Corporation: Performed a groundwater investigation in a coastal area of New Jersey. Scope of work included the installation and sampling of 23 monitoring wells, including 6 well clusters on a 200-acre bulk storage facility with over 200 bulk storage tanks. The study focused on two impacted aquifers (one confined, the other unconfined) and the associated tidal influences. Water quality information from the wells was used to determine the fresh water/salt water mixing line. A flow net groundwater model was established for the site that allowed wells installed along the mixing line to be used to calculate the contaminant loading into the adjacent surface water body. This loading calculation was used to establish contaminant loading discharge limits for regulatory compliance.

14. Brief resume of key persons, specialists and individual consultants/associates anticipated for this contract:			
Name of Individual		Title	
Oluwole Songonuga, Ph.D., PE		Chief Engineer	
Personnel Classification/Level <i>(Reference ASRAC Statement of Work Table 1)</i>		Area of Expertise	
Professional Level VI		Environmental Engineering	
Proposed Project Role <i>(e.g. Project Manager, Project Engineer, Project Hydrologist, ect.)</i>		Education	
Program Quality Control Manager		PhD, Sanitary & Environmental Eng; MS., Civil Engineering (Soils Mechanics); BS, Civil Engineering	
Years of Experience	Years of Related Experience	Registrations and Certifications Held and Year Received	
40	40	Professional Engineer: AZ, CT, FL, IL, MD, NJ, NM, NY, PA, DC, VA, Nigeria	
Employment History			
	Firms Name	Start Date	End Date
1.	BEM Systems, Inc.	October 1990	Present
2.	Louis Berger and Associates	April 1989	October 1990
3.	New Jersey Institute of Technology	June 1969	August 1973
4.	University of Ife, Nigeria	September 1973	April 1989
5.	West Virginia University, Morgantown, WV	June 1967	May 1969
6.	McGill University, Montreal, Canada	September 1965	June 1967
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<p>Executive Summary of Career Highlights</p> <p>Dr. Songonuga is BEM's Chief Environmental Engineer responsible for the technical quality of engineering programs at BEM. He directs the firm's engineering activities including remedial action projects and remedial design. This encompasses the preparation of construction bid documents, plans, environmental specifications and cost estimates. He is also the firm's Manager of Quality Control System Operations overseeing all data collection, analysis, management, reporting, and client services. Dr. Songonuga has over 30 years of direct experience and expertise in large-scale remedial action programs, including Performance-Based Contracts (PBCs) and Guaranteed Fixed-Price Remediation Contracts (GFPRs), in addition to an equal amount of overall experience in environmental engineering and remedial construction.</p> <p>Williams AFB, Mesa, AZ: Dr. Songonuga is the Lead QC Engineer responsible for performing QC of all engineering work on the \$6M CERCLA program. To date, this has included the review of all remedial action work plans, closure reports, modeling, treatability studies, specifications, and risk assessment documents for various remedial actions taking place at the site, such as high-temperature thermal treatment, Soil Vapor Extraction (SVE), bioventing, and natural attenuation.</p> <p>AFCEE Worldwide Contract: As Chief Engineer, Dr. Songonuga provides engineering direction and technical peer review for diverse Installation Restoration Programs (IRPs) and Chemical Quality Control at Air Force, Army, Navy, and National Aeronautics Space Administration (NASA) facilities throughout the US. An important aspect of the program was the successful completion of remedial investigation and action projects without disruption to military facility operations on active air bases. Dr. Songonuga serves as the QC Manager on BEM's existing PBC and GFPR cleanup contracts, and has designed QA/QC programs and training programs on technical and risk management decision-making on large-scale Remedial Action Contract (RAC) programs. A wide range of remediation technologies are applied, from soil removal actions, to bioremediation, air sparging, pump and treat, and thermal treatment.</p> <p>S&G Site, Scottsdale, AZ: Dr. Songonuga serves as the Quality Control Manager for this petroleum release project. Dr. Songonuga oversees and reviews all technical work products, ensuring the quality of the technical work and achievement of project objectives. Site remediation includes SVE and air sparging.</p>			

Brief Resume Continued

Triborough Bridge & Tunnel Authority (TBTA), Underground Storage Tanks, Environmental Site Assessment and Remediation Program, New York City, NY: Project Director for the engineering design effort to address the contamination problems encountered during the site investigation phase of the project as well as the work related to UST closure plan preparation, replacement of tank systems, new tank design, construction specifications and the engineer's cost estimate. Designed the closure of forty USTs and installation of twenty replacement fuel, oil and gasoline USTs including dispensers, fire suppression, leak detection and corrosion protection systems at several facilities of the TBTA, in New York City. Reviewed existing environmental reports and other pertinent engineering data including overseeing, evaluating and validating tank and piping tightness testing; developed and evaluated remedial alternatives for contaminated sites (both short-term and long-term resolutions); investigated, developed and evaluated remedial alternatives for UST locations; performed cost analysis; and prepared detailed designs for selected remedial alternatives; prepared the technical specifications and engineer's cost estimates as well as the bidding documents used for remediation at contaminated sites. Performed construction management for the closure and installation of all tanks and ancillary features. Responsible for the QA/QC of the contract-ready UST drawings and specifications prepared by the project team and for regulatory compliance and liaison with the regulatory agencies overseeing the project (NYSDEC and NYCDEP).

New Jersey Transit, RI/FS and Environmental Construction Monitoring, Exchange Place Mall Construction and Katyn Monument Relocation, Jersey City, NJ: As Principal Engineer/Chief Engineer/Project Manager, Dr. Songonuga conducted the engineering oversight for the Remedial Investigation and Feasibility Study (RI/FS) program of the Exchange Place Mall and the Gateway Park-and-Ride construction sites. Orchestrated the emergency closure of a UST without construction delays. Prepared the environmental specification supplement to the contract specifications. Prepared the remediation cost estimate and the soil reuse plan.

New Jersey Turnpike Authority (NJTA), Facility-Wide Remedial Investigation: Project Director for a multiple facility environmental site assessment, RI and UST evaluation for removal of various underground fuel product storage systems. Coordinated and prepared design specifications for the upgrading of UST systems for regulatory compliance. Dr. Songonuga prepared specifications for contaminated soil excavations, treatment and disposal and construction dewatering. The construction specifications addressed the following issues: construction dewatering methods, including on-site pretreatment and National Pollution Discharge Elimination System (NPDES) permitting; air monitoring; and soil excavation, handling, disposal and/or treatment.

NJ Transit, Remediation of a Former Battery Plant: Chief Engineer who lead the effort to remediate extensive lead soil contamination from a site in New Jersey on which a large NJ Transit bus maintenance facility was to be constructed. Dr. Songonuga directed the site assessment, risk analysis and the remedial design. Based on the results of the risk assessment, he was able to have the client modify the building design to isolate the structure from the contaminated soil. His plan was submitted to the regulatory agency, and was accepted and approved.

Design and Construction of Final Cover Layers for Municipal Solid Waste Sanitary Landfill, Town of Belvidere & Township of White, NJ: Designed and supervised the construction of the final cover layers for a two-acre municipal solid waste sanitary landfill, including installation and closure of gas and groundwater monitoring wells. The final cover layers consisted of a two-foot thick compacted Zone 3 embankment cover placed in eight-inch loose lifts prior to compaction over the solid waste, with a one-foot thick vegetative topsoil layer. Because twelve quarters of monitoring indicated the absence of sustained methane production and groundwater contamination above background levels, leachate collection and methane gas management were waived for the site. The NJPDES permit and monitoring requirements were terminated.

New Jersey Turnpike Authority, Facility-Wide Remedial Investigation: As Project Director, prepared specifications for contaminated soil excavations, treatment/disposal and construction dewatering for a multiple-facility site/remedial investigation program related to petroleum contamination. Specifications addressed construction dewatering methods, including on-site pretreatment and National Pollution Discharge Elimination System permitting; air monitoring; and soil excavation, handling, disposal and/or treatment.

Spectraserv, RCRA Facility Closure, Large Chemical Waste Processing Plant: Quality Assurance Director responsible for the review and approval of a RCRA closure plan for a large chemical waste processing plant in Kearny, New Jersey.

14. Brief resume of key persons, specialists and individual consultants/associates anticipated for this contract:			
Name of Individual		Title	
Susan L. Ferrel, PG		Senior Project Manager	
Personnel Classification/Level <i>(Reference ASRAC Statement of Work Table 1)</i>		Area of Expertise	
Professional Level V		Environmental Investigation and Remediation	
Proposed Project Role <i>(e.g. Project Manager, Project Engineer, Project Hydrologist, ect.)</i>		Education	
Task Order Project Manager		BS, Geosciences, Rider College, 1983	
Years of Experience	Years of Related Experience	Registrations and Certifications Held and Year Received	
22	22	Professional Geologist: Kentucky, 1994, No. 1252	
Employment History			
	Firms Name	Start Date	End Date
1.	BEM Systems, Inc.	January 1994	Present
2.	Converse Consultants, Inc.	August 1983	January 1994
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<p>Executive Summary of Career Highlights</p> <p>Ms. Ferrel is a Senior Project Manager with over 20-years of experience in environmental investigations and has extensive experience in managing a variety of environmental projects. Her experience includes the design and implementation of remedial investigations, feasibility studies, preparation of specifications and plans, and quality control for environmental reports. This work has been conducted as part of right-of-way acquisitions, roadway/bridge improvement projects, corridor studies, and maintenance facility investigations. As a result of this vast experience, she has developed significant knowledge regarding applicable local, state and federal regulations. Additionally, this experience has developed flexibility allowing multiple programs to precede on-schedule throughout various changes in project design, work scope, regulatory policy changes and funding issues.</p> <p>Ms. Ferrel's expertise in the areas of program management, data analysis and interpretation has been demonstrated specifically through her involvement with the development and oversight of cost recovery programs for the New Jersey Department of Transportation. Ms. Ferrel also coordinates with the Deputy Attorney General's office to provide Property Acquisition Environmental Cost Estimate reports and provides litigation support in preparation of court cases involving potential responsible parties. Her coordination of various transportation projects with regulatory agencies resulted in the design of remediation programs that address site-specific requirements in the most timely and cost-effective manner.</p> <p>City of Phoenix Phase I/II Environmental Site Assessment Contract: Ms. Ferrel is the Quality Control Manager for the Phase I/II ESA Contract for BEM. She is responsible for overall quality control of projects involving project cost estimates, property acquisition issues, site assessments and investigations.</p> <p>NJ Treasury, Division of Property Management and Construction, Removal and Replacement of UST – Statewide. Senior Project Manager responsible for overseeing a team of engineers and scientists for the preparation of detailed final design drawings and specifications for the removal and replacement of over 100 USTs at state-owned facilities throughout New Jersey. Oversees technical staff of engineers and scientists, and coordinates with vendors regarding appropriate system design requirements. Coordinates and addresses comments from NJ Treasury Code and Regional Construction Manager reviews.</p>			

Brief Resume Continued

Prepared comprehensive UST Closure Plan, updated UST Questionnaires and registrations in accordance with the TRSR. Coordinates with NJDEP agencies and facility owners for technical site visits. Prepared Uniform Construction Code Construction Permit Applications and construction cost estimates on a per-site basis, and manages design schedule. BEM will be responsible for the bid phase and oversee construction activities. Collection of post-excavation samples and evaluation of remedial actions will also be included.

New Jersey Department of Transportation, Bridgeport Maintenance Yard, Gloucester County, NJ: As a Program Manager, Ms. Ferrel was responsible for conducting and supervising a site and remedial investigation and dry well closure (remedial action) at the site, as well as conducting a UST evaluation, removal and abandonment. The scope of work that was implemented included a soil/groundwater screening study; groundwater monitoring well installation; soil/groundwater sampling and analysis program; UST abandonment/removal; and oversight of removal of two dry well systems. Evaluated impact of contamination to the on-site septic system and domestic well. A detailed Site Investigation/Remedial Action report was prepared and submitted to the NJDOT and the NJDEP. This report developed a natural attenuation and risk assessment strategy for remediation of groundwater contamination at the site, which was subsequently approved by the NJDEP. During the investigation, Ms. Ferrel served as liaison with the NJDEP case manager during implementation of the remedial action at the site.

New Jersey Department of Transportation, Elmwood Park Demolition Site #3, Elmwood Park, NJ: Program Manager for remedial investigation of soil and groundwater contamination at this former gasoline station site acquired by the NJDOT during the construction of Rt. 80 entrance and exit ramps. As part of the scope of work for this project, groundwater monitoring wells were installed and geophysical surveys and aquifer tests were conducted to determine aquifer characteristics, flow direction and gradient, bedrock depth and contour. Ms. Ferrel performed an extensive evaluation and analysis of historic site data, and developed technically feasible remedial action alternatives for the site, which would satisfy the requirements of NJDEP's Technical Requirements for Site Remediation. In conjunction with the scope of work and with NJDEP requirements, Ms. Ferrel directed a team of professions on the design of a pilot test to test the feasibility of implementing a dual phase extraction system (for soil and groundwater remediation) as a cost effective method of site remediation.

NJDOT Rt. 31, Clinton, NJ: Task Manager responsible for conducting Preliminary Assessment and Site Investigation to support roadway widening along Rt. 31 that would impact a gasoline service station. During the PA phase Ms. Ferrel coordinated regulatory file reviews, historical background information compilation, aerial photograph interpretations, and site reconnaissance. The PA identified areas of environmental concern that were investigated during the Site Investigation phase. The impact of construction to a nearby drinking water reservoir was evaluated. A soil gas survey, and a soil and groundwater sampling and analysis program were conducted to evaluate impact of contamination to proposed construction activities, the on-site septic systems and domestic wells.

NJDOT Boonton Transport Site, Newton, NJ: Responsible for a post-construction groundwater remedial investigation program consisting of geoprobe groundwater sampling and installation of groundwater monitoring wells. The work was performed in compliance with an NJDEP directive to provide delineation of residual contamination from the removal of 7 underground storage tanks during a prior roadway-widening program.

NJDOT Overpass Relocation, Rt. 295, Exit 17, Gloucester County, NJ: Task Manager responsible for conducting Preliminary Assessment (PA) and Site Investigation (SI) to support an overpass relocation. During the PA phase Ms. Ferrel coordinated regulatory file reviews, historical background information compilation, aerial photograph interpretations, and site reconnaissance. The PA identified areas of environmental concern that were investigated during the Site Investigation phase. A multiple site geophysical survey, and a soil and groundwater sampling and analysis program were conducted to evaluate impact of contamination to proposed construction activities.

NJDOT Newark Complex, Essex County, NJ: Responsible for the management of site and remedial investigations, permitting, remedial cost estimates and construction oversight of a 15-acre property (landfill) proposed for a new NJDOT maintenance complex. The project involved various environmental studies to identify areas of potential environmental concern, evaluation of nature and degree of contamination and estimation of cost associated with the mitigation of environmental impacts on acquisition. BEM also obtained a multi-year Major Landfill Disruption Permit and permit renewal, on a fast-track basis, and secured an NJDEP On-scene Coordinator Permit for the management of contaminated groundwater during construction. Also, obtained monitoring well permits. BEM continued supporting the NJDOT project team by coordinating with the local POTW for the construction dewatering and performed third party technical review of numerous environmental documents from multiple contractors. Ms. Ferrel acted as liaison between the NJDOT, NJDEP, NJ Treasury, site engineers, architects, design consultants, construction contractor, subcontractors, and construction managers before and during construction. Coordinated post remedial air permitting activities.

14. Brief resume of key persons, specialists and individual consultants/associates anticipated for this contract:			
Name of Individual Andrew Crabb		Title Application Development & Analytical QA/QC Manager	
Personnel Classification/Level <i>(Reference ASRAC Statement of Work Table 1)</i> Professional Level V		Area of Expertise Analytical chemistry, laboratory procedures, database systems, PCE chemistry	
Proposed Project Role <i>(e.g. Project Manager, Project Engineer, Project Hydrologist, ect.)</i> Analytical Chemistry Services Manager		Education Graduate Studies, Chemistry, BA, Chemistry	
Years of Experience 14	Years of Related Experience 14	Registrations and Certifications Held and Year Received American Chemical Society	
Employment History			
	Firms Name	Start Date	End Date
1.	BEM Systems, Inc.	June 1998	Present
2.	O'Brien & Gere Engineers, Inc.	July 1991	June 1998
3.	Massachusetts Institute of Technology	August 1989	July 1991
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<p>Executive Summary of Career Highlights</p> <p>Mr. Crabb is a senior chemist, database expert, and software developer with more than 14 years of diversified experience in the hazardous waste and environmental consulting fields. He is expert at analytical data quality assurance/quality control management and planning, environmental database management, software design and development, laboratory contracting and oversight, and field sample collection and handling. Mr. Crabb has corporate responsibility for analytical data quality assurance and quality control for all projects performed by BEM. He has directly overseen these activities on hundreds of contamination investigation and remediation projects. Mr. Crabb has extensive experience and expertise in database applications programming and implementation of web-based, wireless and geographic information system (GIS) components.</p> <p>Williams Air Force Base: Mr. Crabb is the Analytical Chemistry Manager for the \$6M Williams AFB CERCLA program. Mr. Crabb personally manages all laboratory subcontracting and coordination, directs field sampling protocols for groundwater, soil, and vapor sampling, oversees data validation, and manages electronic data acquisition systems. Mr. Crabb also developed and maintains the Williams AFB comprehensive, web-enabled environmental database and information management system that electronically manages all environmental data for the Williams CERCLA program.</p> <p>Arizona Department of Environmental Quality: Mr. Crabb designed and developed a checklist management system for evaluating historical laboratory data quality. The ADEQ Checklist Manager (ACM) allows users to review data quality, enter observations, and generate checklist forms. Users can readily view the status of large numbers of checklists and can readily find, view and print checklists.</p> <p>BEMIS Environmental Management Information System: BEMIS (BEM Environmental Management Information System) is a modular, web-based system designed to support staff and management in managing environmental sites and projects. This integrated system includes modules for analyzing and graphing sampling analytical results, planning and tracking field activities, recording and presenting chemical, biological, geologic and lithologic data and supporting geographic capabilities. Mr. Crabb designed the data model, which integrated DOD Spatial Data Standard for Facilities, Infrastructure, and Environment (SDSFIE), an open data schema, with additional capabilities needed for BEMIS.</p>			

Brief Resume Continued

QC Central: Mr. Crabb overseas BEM's QC Central database management system including the recent conversion from Access to SQL. Subsequently, Mr. Crabb designed and implemented an upgrade from client-server design to a web-based tool integrated with BEMIS and continues to actively manage this system.

14. Brief resume of key persons, specialists and individual consultants/associates anticipated for this contract:			
Name of Individual		Title	
Brian Pedersen, PE		Senior Project Engineer	
Personnel Classification/Level <i>(Reference ASRAC Statement of Work Table 1)</i>		Area of Expertise	
Professional Level V		Environmental Engineering	
Proposed Project Role <i>(e.g. Project Manager, Project Engineer, Project Hydrologist, ect.)</i>		Education	
Senior Project Task Assignment Engineer		BS, Chemical Engineering, New Jersey Institute of Technology, 1987	
Years of Experience	Years of Related Experience	Registrations and Certifications Held and Year Received	
18	18	Professional Engineer, New Jersey, 1999	
Employment History			
	Firms Name	Start Date	End Date
1.	BEM Systems, Inc.	October 1990	Present
2.	Louis Berger & Associates, Inc.	August 1988	October 1990
3.	NUS Corporation, Inc.	December 1986	August 1988
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<p>Executive Summary of Career Highlights</p> <p>Mr. Pedersen is a Senior Environmental Engineer with over 16 years experience in the environmental and regulatory compliance field. He is experienced in underground and aboveground storage tank management; air quality compliance; facility-wide environmental compliance audits; the preparation of spill prevention, control and countermeasure (SPCC) plans; pollution prevention evaluations; indoor air quality evaluations; Risk Management Program and Process Safety Management Planning; Phase I and Phase II Environmental Site Assessments (ESAs); the planning, implementation and supervision of field sampling operations; data analysis and report preparation of hazardous waste site investigations; remedial action activities and landfill investigations.</p> <p>Sri Lanka Tsunami Relief Project, Drinking Water Treatment System Installations – Assisted in the installation of water treatment systems at four locations in Sri Lanka that were effected by the tsunami.</p> <p>Williams Air Force Base, ST012 site, Phoenix, AZ: Project Engineer for the design of the above ground portions of the Thermal Enhanced Extraction (TEE) system and the Soil Vapor Extraction (SVE) system for the remediation of spilled jet fuel at the ST012 site at the former U.S. Air Force Base. Worked on the remedy selection, design and construction of the remedial equipment and piping collection system for this large scale steam injection and soil/vapor extraction system. Evaluated the construction contractors bid package to select a company to build the remedial system. Currently Mr. Pedersen is Project Engineer directing remediation system O&M.</p> <p>S&G Investments, Limited Partnership, AZ: Project manager for the operation of a soil vapor extraction/air sparge system at a former gasoline station site. Responsible for conducting the remedial action in compliance with the Corrective Action Plan (CAP) approved by the Arizona Department of Environmental Quality. Directed closure of the remedial action when the cleanup goals were achieved and sought reimbursement for the client from the State Assurance Fund for the costs of the remedial action.</p>			

Brief Resume Continued

Luke Air Force Base, AZ: Project manager for the operation of a SVE system at a former tank field site containing gasoline and oil located at the Air Force Base.

Caledonia Knitwear Corporation, ISRA Site Closure, Newark, NJ: Project Manager for Preliminary Assessment (PA) and Site Investigation of a manufacturing facility that was subject to the requirements of ISRA. The investigation involved a PA that identified the areas of concern. A site inspection was conducted that consisted of soil borings and soil sampling adjacent to two fuel oil USTs. Residual contamination was detected but at concentrations that were below regulatory action levels. The site received a negative declaration from the NJDEP.

USFWS Edwin B. Forsythe NWR, Barnegat, NJ Superfund Expanded Site Inspection and Hazard Ranking System (HRS) Screening: Project Manager. This project was conducted for the USFWS Region 5 office as part of the Superfund site listing process. A portion of the national wildlife refuge was being evaluated for possible inclusion on the National Priority List (NPL) based on historical dumping activities. Additional sediment and surface water samples were collected to supplement the previous Site Inspection sampling conducted by an USEPA contractor. Mr. Pedersen prepared the HRS screening package based on the analytical sampling results. The HRS score for the site was below 28.50, which made the site ineligible for listing on the NPL. The USEPA agreed with the findings and issued a no further action classification for the site.

UST Removals and Replacements, and Soil Remedial Action, Minneapolis and St. Paul, MA: Project Engineer. Responsible for the removal and replacement of two large heating oil USTs at two high-rise apartment buildings, and the closure and removal of three leaking gasoline USTs at one building. The project included preparation of bid documents, design plans and specifications and the evaluation and selection of the subcontractor. Mr. Pedersen provided oversight of field operations. He designed the remedial investigation and subsequent cleanup activities associated with the leaking USTs, which consisted of the excavation of 180 cubic yards of petroleum-contaminated soils. Mr. Pedersen prepared all reporting documents to the regulatory agency. The state agency approved the remedial actions and indicated that no further action was required at the site.

Project Danube Facility, Phase I and II ESAs, Hudson County, NJ: Project Manager responsible for the due diligence evaluation of a paint additive manufacturing facility located in Jersey City. Reviewed all pertinent records and files to determine the facility's environmental regulatory compliance status and to identify potential areas of environmental concern for air, soil and groundwater quality from past and/or present facility operations. After identifying several areas of concern, was responsible for field investigations oversight which included the collection of subsurface soil and groundwater samples for laboratory analysis and the cleaning and inspection of the interior floor drain and the exterior stormwater collection systems. Upon completion of the field operations, Mr. Pedersen was responsible for the submittal of a comprehensive report of the findings with recommendations and estimated costs for remedial actions.

Facility-Wide Remedial Investigation, New Jersey Turnpike Authority, NJ: Project Engineer for a multiple facility site assessment, remedial investigation and UST evaluation for removal of various underground fuel storage systems. Coordinated and prepared specifications for contaminated soil excavations, treatment and disposal, and construction dewatering. Specifications addressed the following issues: dewatering methods, including on-site pretreatment and NPDES permitting, air monitoring, and soil excavation, handling, disposal and/or treatment.

Phase II Environmental Site Assessment (ESA) at Hilton Green Properties located in Newport News, VA: Project Manager. The investigation was conducted for a potential purchaser of the subject property to determine whether adjacent off-site pollution sources have impacted the subject property. The investigation consisted of a review of two previously conducted Phase I ESAs and of local hydrogeological records. The reviewed information was utilized to prepare a soil and groundwater sampling plan, which would best determine on-site migration pathways. Mr. Pedersen prepared a sampling plan, which consisted of preliminary soil headspace screening program followed by the collection of shallow soil samples and groundwater samples. The groundwater samples were collected utilizing a Geoprobe® Subsurface Sampling System which is a quick (compared to the installation of monitoring wells) and effective method to retrieve shallow groundwater samples. The results of the sampling activities successfully determined that limited groundwater contamination exists on the subject property estimated to be migrating from the adjacent property. Further investigation of the subject property was recommended prior to site acquisition to confirm the extent of the detected contamination and its source.

14. Brief resume of key persons, specialists and individual consultants/associates anticipated for this contract:			
Name of Individual Joel Riebli		Title Environmental Engineer	
Personnel Classification/Level <i>(Reference ASRAC Statement of Work Table 1)</i> Field Services Manager		Area of Expertise Field methods, site safety, well installation	
Proposed Project Role <i>(e.g. Project Manager, Project Engineer, Project Hydrologist, ect.)</i> Field Services Manager		Education BS, Environmental Engineering	
Years of Experience 7.5	Years of Related Experience 7.5	Registrations and Certifications Held and Year Received OSHA 40-Hour Haz Mat Site Worker Course + AR, Supervisory Training	
Employment History			
	Firms Name	Start Date	End Date
1.	BEM Systems, Inc.	March 2000	Present
2.	Western Technologies, Inc.	June 1996	May 1998
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<p>Executive Summary of Career Highlights</p> <p>Mr. Riebli is BEM's senior field services manager and Site Safety Officer for the Southwest Region. His responsibilities have included operation and maintenance of soil vapor extraction (SVE) and air sparging remedial systems, environmental media sampling, and oversight of environmental remedial contractors. Mr. Riebli has also conducted well drilling / installation oversight, soil boring and groundwater sampling, soil vapor air sampling and groundwater monitoring activities.</p> <p>Williams Air Force Base, AZ: Mr. Riebli is the senior Field Services Manager for this large CERCLA program involving multiple sites. He supervises field staff conducting soil, groundwater, and vapor sampling, and performs weekly soil gas sampling and SVE operation and maintenance for a 750-scfm Flame Oxidizer unit. Mr. Riebli has utilized passive diffusive bag groundwater sampling to evaluate groundwater VOC concentrations. Mr. Riebli supported assessment of soil vapor conditions in the vadose zone using an innovative PneuLog technology. In 2004, Mr. Riebli oversaw the construction of over 30 extraction, injection, SVE, and monitoring wells extending to depths of over 230 feet. These wells were part of an innovative thermal remediation system. Mr. Riebli also oversaw the construction of the complex aboveground treatment system. Mr. Riebli also supported remedy selection and design of remedial systems.</p> <p>Phoenix-Goodyear Airport, AZ: Mr. Riebli is responsible for performing semi-monthly light non-aqueous phase liquid recovery activities for AVGAS, TCE and PCE contaminated site. He performs semi-annual sampling and reporting of AVGAS, TCE and PCE. He also modified SVE vacuum line extensions in association with airport infield resurfacing activities.</p> <p>Luke Air Force Base, AZ: Mr. Riebli installed a 250 scfm Thermal /Catalytic Oxidizer SVE system and performed soil gas vapor sampling.</p> <p>S&G Investments, Limited Partnership, AZ: Mr. Riebli installed and operated an SVE/air sparge system. He also performs quarterly groundwater sampling including the field analysis of geochemical natural attenuation indicators.</p>			

Brief Resume Continued

Marine Corps Air Station-Yuma, Rotary Wing Hot Fueling Site, AZ: Performed oversight of eight 45-degree angle boring and four vertical borings around the refueling pits for the presence of petroleum-contaminated soils. Mr. Riebli was also responsible for field screening and collecting soil samples.

McConnell Air Force Base, KS: Performed semi-annual LTM groundwater sampling and reporting of four contaminated sites in Wichita, Kansas. Site includes flammable liquid waste, JP-4, MOGAS, diesel fuel, waste oil, TCE, PCE, paint thinners, paints, and heavy metals.

Holloman Air Force Base, NM: Responsible for subcontractor oversight during AVGAS Tank 14 and Tank 22 construction / upgrades and cathodic protection system installation.

Field Analysis and Tests, Various Locations: Responsible for the operation of various geotechnical field equipment to include: Nuclear Gage, air gage, slump, coring machine (for soil, asphalt and concrete cores), and chemical spraying. Field sampling of various materials and field reporting of numerous results and unique occurrences.

Lab Analysis and Tests: Consolidation testing (soils), sieve (soils and rock), rice testing (asphalt), moisture content, shear test (soil), compression strength testing (concrete, block, brick, mortar, and soil), freeze/thaw (block and brick), shrink/swell (block and brick), Portland Cement Concrete Mix designs, oil abstraction (asphalt) and percolation testing (rock and soil).

14. Brief resume of key persons, specialists and individual consultants/associates anticipated for this contract:			
Name of Individual		Title	
Michael Kirchenbauer		Senior Geologist	
Personnel Classification/Level <i>(Reference ASRAC Statement of Work Table 1)</i>		Area of Expertise	
Professional Level IV		Environmental Investigation and Remediation	
Proposed Project Role <i>(e.g. Project Manager, Project Engineer, Project Hydrologist, ect.)</i>		Education	
Project Geologist/Task Manager		BS, Geological Sciences, Rutgers University, 1998	
Years of Experience	Years of Related Experience	Registrations and Certifications Held and Year Received	
7	7	New Jersey UST Subsurface Evaluation	
Employment History			
	Firms Name	Start Date	End Date
1.	BEM Systems, Inc.	April 2003	Present
2.	Bell Environmental	June 2001	April 2003
3.	Melick-Tully and Associates, LLC	June 1998	May 2001
4.			
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<p>Executive Summary of Career Highlights</p> <p>Mr. Kirchenbauer has experience in the performance of preliminary assessments, remedial investigations, remedial action activities, and geotechnical activities. Mr. Kirchenbauer's office experience includes the generation of sampling and work plans, health and safety plans, writing of technical reports, permitting, and assistance in data evaluation and cost estimates, etc. Field responsibilities include the implementation and development of field programs for the investigation and remediation of contaminated sites. Additional responsibilities include the supervision of drill rigs for both soil boring and monitoring well installation, collection of soil, water, and air-quality samples for chemical and/or geotechnical analysis. Mr. Kirchenbauer also has experience with maintenance and operation of soil-vapor extraction (SVE) systems and ground water pump and treat remedial systems.</p> <p>Williams AFB: Provided design support for several injection/extraction wells associated with an innovative thermal treatment for groundwater contaminated with petroleum hydrocarbons. Project tasks included the analysis of aquifer pump tests and grain size distributions at the site.</p> <p>Robins AFB: Provided design and field support for the installation of numerous injection wells for a pilot study as well as full-scale operation of a groundwater treatment system. Mr. Kirchenbauer's project tasks also included aquifer test analysis and grain size distribution analysis.</p> <p>American Chrome and Chemicals, Elizabeth, NJ: Mr. Kirchenbauer acted as the Project Manager for a long-term monitoring project. Mr. Kirchenbauer was in charge of the implementation of two years of a groundwater sampling program and reporting requirements in accordance with institutional controls at the site.</p> <p>NJ Transit (NJT), Southern New Jersey Light Rail Transit System (SNJLRTS): Developed and implemented waste-classification field-sampling program for soil berms constructed during the construction of the SNJLRTS. Prepared reports presenting results of the waste-classification sampling and assisted in the preparation of a Construction Environmental Control Plan (CECP) for use during construction activities consisting of a soil disposal program. Implemented soil berm disposal</p>			

Brief Resume Continued

program by performing daily real-time noise, dust monitoring and air sampling, construction oversight, off-site soil disposal management, and Health and Safety oversight. Interfaced with NJT and the contractor to ensure compliance of the soil berm disposal program with the CECF and all applicable environmental standards and regulations. Documented and ensured daily environmental compliance with respect to the CECF and environmental standards and regulations.

McClellan AFB: Mr. Kirchenbauer acted as the lead field personnel for soil and soil gas sampling at the site. Tasks included the preparation of all applicable permits as well as report production.

Town of Geneva, NY: Supervised installation and well development of township water-supply well using air-rotary and cable tool drilling methods. Documented drilling activities and ensured compliance with the project design and specifications. Assisted in preparation of Well Construction and Compliance Report upon completion of the installed water-supply well.

NJ Transit (NJT), Hudson-Bergen Light Rail Transit System (H-BLRTS): Conducted local, county, and state reviews of historical records for preparation of a preliminary assessment for a proposed light-rail alignment. Reviewed environmental data, historical Sanborn Fire Insurance Maps, and aerial photography of the proposed location of the alignment to identify any potential areas of environmental concern.

14. Brief resume of key persons, specialists and individual consultants/associates anticipated for this contract:			
Name of Individual Dianne Yunker		Title Staff Scientist	
Personnel Classification/Level <i>(Reference ASRAC Statement of Work Table 1)</i> Professional Level III		Area of Expertise GIS, Data Management, Environmental Assessments and Sampling	
Proposed Project Role <i>(e.g. Project Manager, Project Engineer, Project Hydrologist, ect.)</i> Task Order Project Scientist/Data Manager		Education BA, Hydrology, St. Cloud State University, 2000	
Years of Experience 5	Years of Related Experience 5	Registrations and Certifications Held and Year Received	
Employment History			
	Firms Name	Start Date	End Date
1.	BEM Systems, Inc.	February 2003	Present
2.	Arizona Department of Water Resources	October 2000	February 2003
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<p>Executive Summary of Career Highlights</p> <p>Ms. Yunker is an Environmental Scientist in the Phoenix office and has five years experience in the environmental field working for the State of Arizona's Department of Water Resources as a hydrologist in the Water Quality Assurance Revolving Fund (WQARF) section. She has extensive experience in conducting well inventories including locating, surveying and mapping well locations. This data was used to reconcile discrepancies between several different well databases. Ms. Yunker was part of a team that reviewed well construction designs for newly proposed wells in environmentally sensitive areas and established standards for proper well abandonment. She also gained valuable relational database skills and has experience with Geographic Information Systems (GIS). Ms. Yunker was the project manager for the South Mesa WQARF Well Inventory. She coordinated all field activities, created detailed maps in ArcView 8.2 and wrote the draft report for that phase of the site.</p> <p>At BEM, Ms. Yunker has conducted groundwater and air sampling, water level measurements, NAPL removal, and field analysis using Hach instruments and gained experience in the operation and maintenance of a soil vapor extraction (SVE) remedial system. Ms. Yunker has also provided field support during well drilling / installation activities and has overseen the handling and proper disposal of investigation derived waste. She represents Phoenix in BEM's QA/QC process improvement team, and has been working on applying the web-based BEMIS data management system for Williams AFB. Ms. Yunker is utilizing her GIS skills for various projects.</p> <p>Ms. Yunker has also gained experience with Phase I Environmental Site Assessments (ESA) for the City of Phoenix in support the light rail property acquisition and for the Community Noise Reduction Program. She conducted research for each site in accordance with ASTM and City of Phoenix specific standards. Most properties were located along busy corridors with unique environmental issues.</p>			

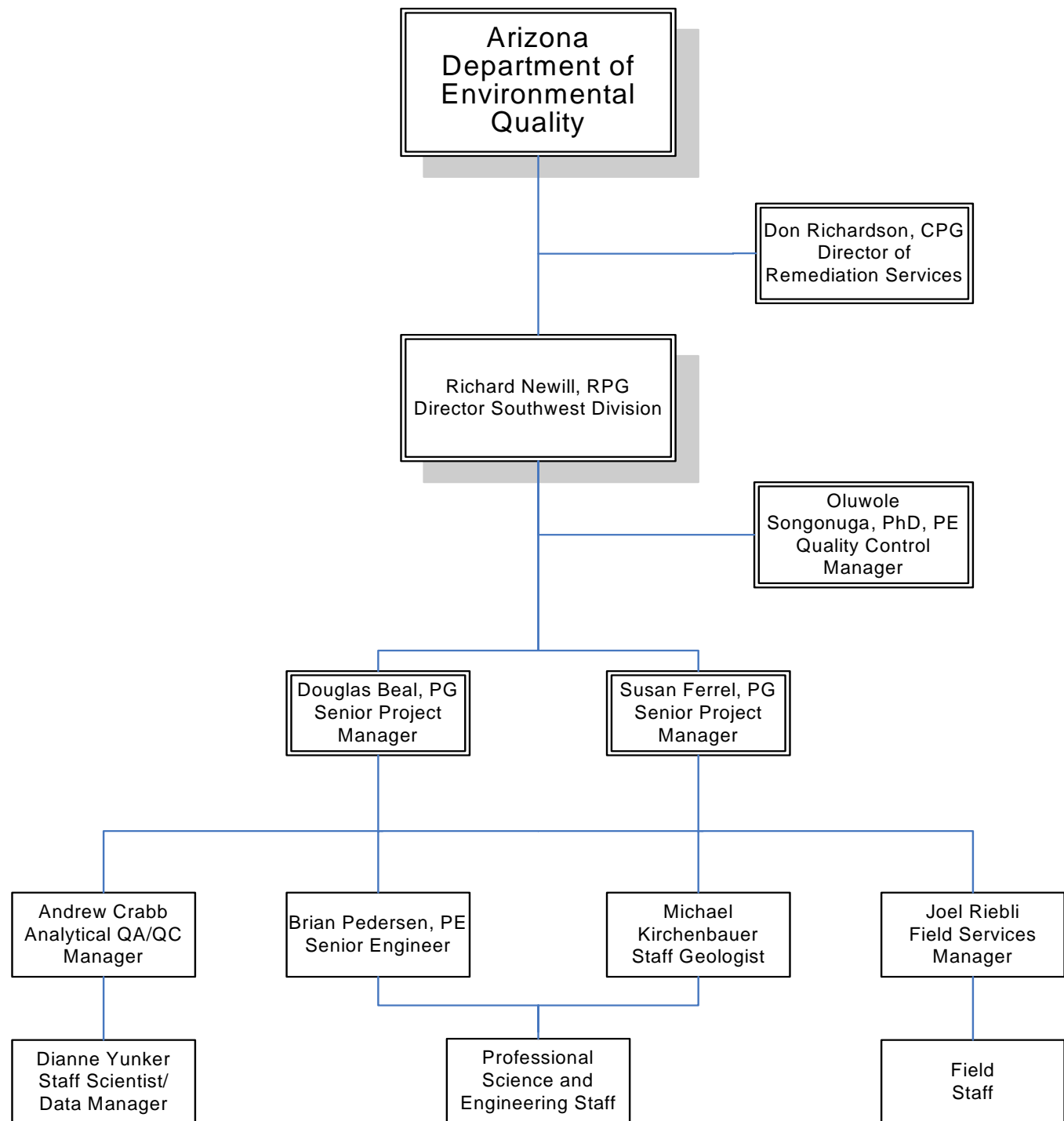
Brief Resume Continued

Williams Air Force Base, Arizona. Performed annual LTM groundwater sampling and reporting for several sites including a CERCLA regulated jet fuel contamination site and an Arizona LUST site. Analyzed groundwater samples for natural attenuation parameters using the HACH colorimeter and digital titration. Provided field support during the drilling and installation of new SVE, injection/extraction and monitor wells. Assisted with Soil Vapor Extraction (SVE) maintenance. Updated a set of Standard Operating Procedures (SOPs) now utilized at all Williams Air Force Base sites. Produced graphs and GIS figures for reports and presentations.

Phoenix-Goodyear Airport, Arizona. Participated in the semi-monthly light non-aqueous phase liquid recovery activities for AVGAS, TCE and PCE contaminated site. Perform semi-annual sampling and reporting of the LNAPL recovery and groundwater sampling results. Produced graphs and GIS figures for reports.

Phase I Environmental Site Assessment, City of Phoenix. Has conducted several Phase I ESAs for due diligence for the City of Phoenix. The Phase I ESAs were conducted in accordance with the most recent ASTM E1527-00 standard. Activities included: a site reconnaissance; review of historical aerial photographs; review of city, federal, and state records; review of environmental database information; and report and figure preparation.

15. Provide an organizational chart showing the staffing and lines of authority for the key persons to be used under this contract.



16. Complete the Pricing Schedule in its entirety.		
Support Services	Minimum Responsibilities, Qualifications and Education	Base Hourly Rate
Support Level I	Responsibilities: Clerical, word processing, filing, general administration. Qualifications: Entry level, no experience restriction. Education: No education restriction.	\$ 30.00
Support Level II	Responsibilities: Drafting, project manager's assistant, graphics. Qualifications: 1 - 2 years experience. Education: No education restriction.	\$ 33.00
Support Level III	Responsibilities: Drafting supervisor, administrator supervisor, Senior Word Processor. Qualifications: 2 - 4 years experience. Education: No education restriction.	\$ 36.00
Field Services	Minimum Responsibilities, Qualifications and Education	Base Hourly Rate
Field Services Level I	Responsibilities: Closely supervised; conducts routine heavy labor during equipment installations; sampling/gauging, equipment maintenance. Qualifications: Entry level, 1 - 2 years of experience. Education: No education restriction.	\$ 40.00
Field Services Level II	Responsibilities: Limited supervision; occasional heavy labor; sampling/gauging, equipment installations, operations, troubleshooting. Qualifications: 2 - 4 years of experience. Education: No education restriction.	\$ 45.00
Field Services Level III	Responsibilities: Supervises on-site tasks such as system installations and operations, trouble shooting; technical advisor. Qualifications: 5 - 7 years of experience. Education: No education restriction.	\$ 50.00
Field Services Staff (Cultural resource surveys or archaeological studies and data recovery only)	Responsibilities: Limited supervision; experience in historic and prehistoric archaeological investigations, reconnaissance and intensive surveys. Qualifications: 1 - 2 years experience/knowledge of the history and prehistory of Arizona. Education: Bachelor's degree in archeology required.	\$ 55.00
Field Services Manager	Responsibilities: Overall supervision of field services staff; works with Project Managers on scheduling and coordination. Qualifications: 7 - 9 years of experience. Education: No education restriction.	\$ 65.00
Professional Personnel *	Minimum Responsibilities, Qualifications and Education	Base Hourly Rate
Professional Level I	Responsibilities: Close supervision, routine tasks associated with environmental projects. Qualifications: 1 - 2 years of experience. Education: Bachelor of Science (BS) degree.	\$ 70.00
Professional Level II	Responsibilities: Collects and interprets data, report writing, provides project input. Qualifications: 2 - 4 years of experience Education: Bachelor of Science (BS) degree.	\$ 75.00
Professional Level III	Responsibilities: Limited supervision, independent fieldwork, oversees Professional Levels I and II. Qualifications No. 1: 4 - 6 years of experience with Bachelor of Science (BS) degree. Qualifications No. 2: 1-2 years of experience with Masters degree.	\$ 80.00
Professional Level IV	Responsibilities: Manages projects of moderate scope, prepares cost estimates, supervises others. Qualifications No. 1: 6 - 8 years experience with Bachelor of Science (BS) degree or registration (PE or RG). Qualifications No. 2: 3 - 4 years of experience with Masters degree.	\$ 90.00
Professional Level V	Responsibilities: Senior technical leader for environmental projects, QA of Project Plans, report review. Qualifications: 8 or more years of experience. Education: Advanced degree in field or registration (PE or RG).	\$ 120.00
** Must meet both the experience & education requirements **		
Professional Level VI	Responsibilities: Recognized registered professional, resident expert, expert testimony, QA of Project Plans and report review and/or Oversees and coordinates all levels of personnel, senior technical leader and has signature authority. Qualifications No. 1: 5 or more years in field project formulation, survey, excavation and technical reporting experience. Education No. 1: Doctorate degree and registration (PE or RG). Qualifications No. 2: 12 or more years of experience. Education No. 2: Advanced degree in field and registration (PE or RG). Qualifications No. 3: 20 or more years in field project formulation, survey, excavation and technical reporting experience. Education No. 3: Bachelor of Science (BS) degree in applicable field of study.	\$ 125.00
** Must meet both the experience & education requirements **		
*	There will be multiple technical disciplines that will fall under the descriptions of each professional level. A geologist, engineer, public involvement specialist, or environmental scientist with one year environmental experience would each fall under a Professional Level I.	
Aggregate Hourly Rate Total:		\$ 914.00

17. Complete the Rental Equipment Pricing Schedule in its entirety.

Equipment Name	Price Per Day	Price Per Week	Price Per month
Vehicle	\$ 61. 00	\$ 375. 00	\$ 1,050. 00
Generator	\$ 45. 00	\$ 136. 00	\$ 405. 00
Interface Probe	\$ 55. 00	\$ 165. 00	\$ 495. 00
Organic Vapor Meter	\$ 75. 00	\$ 225. 00	\$ 675. 00
pH / EC / Temp Meter	\$25. 00	\$ 50. 00	\$ 150. 00
PID	\$ 75. 00	\$ 225. 00	\$ 675. 00
FID	\$100. 00	\$ 300. 00	\$ 900. 00
Hnu	\$ 75. 00	\$ 175. 00	\$ 525. 00
Draeger Pump	\$ 15. 00	\$ 45. 00	\$ 135. 00
CGI (Combustible Gas Indicator)	\$ 75. 00	\$ 225. 00	\$ 675. 00
Bladder Pump	\$ 60. 00	\$ 200. 00	\$ 200. 00
Cetrifugal Pump	\$ 90. 00	\$ 230. 00	\$ 690. 00
Peristaltic Pump	\$ 30. 00	\$ 70. 00	\$ 210. 00
Water Level Indicator	\$ 25. 00	\$ 50. 00	\$ 150. 00
Metal Detector	\$ 25. 00	\$ 50. 00	\$ 150. 00
Steam Cleaner	\$ 52. 00	\$ 180. 00	\$ 540. 00
Air Compressor	\$30. 00	\$ 90. 00	\$ 270. 00
Dissolved Oxygen Meter	\$ 45. 00	\$ 100. 00	\$ 300. 00
Submersible Pump	\$ 50. 00	\$ 130. 00	\$ 390. 00
Turbidity Meter	\$ 30. 00	\$ 80. 00	\$ 255. 00
Mini Ram	\$ 65. 00	\$ 200. 00	\$ 600. 00
Bailer (reusable)	\$ 42. 00	\$ 42. 00	\$ 42. 00
Hand Auger	\$ 35. 00	\$ 100. 00	\$ 300. 00
Impact Sampler	Included	Included	Included
GPS Equipment	\$ 200. 00	\$ 600. 00	\$ 1,500. 00
Flow Meter	\$ 50. 00	\$ 100. 00	\$ 300. 00
Discrete Inverval Sampler	\$ 25. 00	\$ 50. 00	\$ 150. 00
Flow Through Cell	\$ 172. 00	\$ 516. 00	\$ 1,548. 00
Pressure Transducer, Cable and Data Logger	\$ 85. 00	\$ 225. 00	\$ 650. 00

18. Use this space to provide any additional information or description of resources (including any computer design capabilities) supporting your firm's qualifications for the proposed contract.

BEM Systems, Inc. (BEM) is a full service environmental engineering and consulting firm with over 140 professional scientist and engineers, technical, and administrative staff serving the environmental needs of the public and private sectors. BEM maintains full service offices in Phoenix, AZ, Chatham, NJ, Kansas City, MO, Orlando and West Palm Beach, FL, and Newport News and Fairfax, VA. BEM offers the Arizona Department of Environmental Quality (ADEQ) a Task Assignment team with the expertise, experience, and innovation to successfully perform environmental assessment, investigation, remedial selection and design, construction, and implementation services as required by the RFP. Our team, which has been proven on many other complex environmental remediation projects throughout the nation, including several in Arizona, has the breadth and diversity of technical expertise in the wide range of skills required.

Over 85% of BEM's revenue comes from the State, Federal, and municipal government market. Currently in Arizona, BEM holds two contracts with ADEQ (ASRAC and TMDL), a contract with the City of Phoenix Aviation Department, and multiple task orders with the Air Force Center for Environmental Excellence (AFCEE) for projects at Williams AFB and Marine Corps Air Station Yuma, as well as a contract for performing work at Luke AFB. At Williams AFB, BEM has conducted over \$6M in projects involving environmental assessment, characterization, remedial selection and design, remedial construction and O&M, and long-term monitoring. We facilitate the BRAC Cleanup Team and the public Restoration Advisory Board, conducting meetings and facilitating consensus on complex environmental issues. We also negotiated, designed, and constructed complex SVE and thermal enhanced extraction remediation systems to treat a petroleum release site whereover 1 million gallons of fuel were released to the subsurface.

BEM's Task Order Offer provides the following benefits to ADEQ:

- ✓ A local, Phoenix-based Project Manager with extensive experience in managing investigation and remediation projects to achieve specific project goals on time and within budget.
- ✓ A fully-developed, web-based, GIS-enabled data and information management tool that allows cost effective access to a wide variety of technical data, project reports and documents, and GIS-based interpretive tools to facilitate assessment, design, construction, and O&M project assignments.
- ✓ A cost structure that capitalizes on the experience of senior-level experts to direct the technical approach, while accomplishing the detailed technical work with less costly yet capable staff-level engineers and scientists.

BEM has established a strong reputation with ADEQ Federal Projects Unit (Superfund) personnel based on our leadership and technical expertise on the large-scale, high profile Williams AFB CERCLA program. BEM has supported the transfer of over 96 percent of the former Base property, and is the sole contractor for the Air Force Real Property Agency tasked with completing cleanup of the remaining difficult environmental sites. BEM has earned this position by providing strong client service, meeting commitments, delivering quality deliverables, building positive relationships with stakeholders and the public, and completing assignments on time and within budget. BEM will bring these qualities to the Pollutants contract if selected.

19. The undersigned has certified all information contained in the Professional Services Questionnaire is current and factual.

Richard Newill, RPG
Typed Name



Signed Name

Director Southwest Region
Title

August 31, 2005
Date